

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/549,977
Source: PCT
Date Processed by STIC: 10/03/2005

ENTERED



PCT

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/549,977

DATE: 10/03/2005
TIME: 14:31:47

Input Set : A:\SEQ 32999A.txt
Output Set: N:\CRF4\10032005\J549977.raw

4 <110> APPLICANT: Iourgenko, Vadim
 5 Labow, Mark A.
 6 Song, Chuanzheng
 7 Zhang, Wenjun
 8 Zhu, Jian
 10 <120> TITLE OF INVENTION: Cyclic AMP Response Element Activator
 11 Proteins and Uses Related Thereto
 14 <130> FILE REFERENCE: 4-32999P2
 C--> 16 <140> CURRENT APPLICATION NUMBER: US/10/549,977
 C--> 16 <141> CURRENT FILING DATE: 2005-09-20
 16 <150> PRIOR APPLICATION NUMBER: 60/463,934
 17 <151> PRIOR FILING DATE: 2003-04-18
 19 <160> NUMBER OF SEQ ID NOS: 39
 21 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 2878
 25 <212> TYPE: DNA
 26 <213> ORGANISM: human
 28 <400> SEQUENCE: 1
 29 cccattgac gcaaatgggc ggtaggcgtg tacggtgaaa ggtcttatata agcagagctc 60
 30 gtttagtcaa ccgtcagatc gcctggagac gccatccacg ctgttttgc ac 120
 31 gacaccggaa ccgatccacg ctccggactc tagccttaggc cgccggacgg ataacaattt 180
 32 cacacaggaa acagctatga ccatttaggc tatttaggtg acactataga acaagttgt 240
 33 aaaaaaaagc aggctgtac cggtccggaa ttccccggag gaggaggagg tggccggcag 300
 34 aagatggcga ctccgaacaa tcccgccaaa ttcagcgaga agatcgcgt gcacaatcag 360
 35 aagcaggcgg aggagacggc ggcccttcgag gaggtcatga aggacctgag cctgacgcgg 420
 36 gccgcgeggc tccagctcca gaaatcccac tacctgcaac tggggcccaag ccgaggccag 480
 37 tactatggcg ggtccctgcc caacgtgaac cagatccggaa gtggcaccat ggacctgccc 540
 38 ttccagccca gcggttttct gggggaggcc ctggcagcggt ctccctgtctc tctgaccccc 600
 39 ttccaatccct cgggcctgga caccagccgg accacccggc accatgggtt ggtggacagg 660
 40 gtgtaccggg agcgtgccc gctcggtctcc ccacaccggc ggcggctgtc agtggacaaa 720
 41 cacggacggc aggccgacag ctgccttat ggcaccatgt acctctcacc acccggcggac 780
 42 accagctgga gaaggaccaa ttctgactcc gcccctgcacc agagcacaat gaccccacg 840
 43 cagccagaat cctttagcag tggtcccaag gacgtgcacc agaaaaagagt ttactgtta 900
 44 acagtcccag gaatggaga gaccacatca gaggcagaca aaaaccttc caagcaagca 960
 45 tgggacacca agaagacggg gtccaggccc aagtctgtg aggtccccgg aatcaacatc 1020
 46 ttccctgtcg ccgaccagga aaacactaca gcccctgatcc cggccaccca caacacaggg 1080
 47 ggtccctgc cccgacccatc caacatccac ttccctccc cgctcccgac cccgctggac 1140
 48 cccgaggagc ccacccccc tgactgagc agtcctcggca gacccggcaa cctcgccggcc 1200
 49 aacctgacgc acctggcat cgtggcgcc ggccaggaa tgacccatc tggctcctct 1260
 50 ccacagcacc gcccagctgg cgtcagcccc ctgtccctga gcacagagggc aaggcgtagc 1320
 51 caggcatcgc ccacccctgtc cccgctgtca cccatcactc aggctgttagc catggacgcc 1380
 52 ctgtctctgg agcagcagct gccctacgccc ttcttcaccc aggccggcgtc ccagcagcc 1440

(Cpg-6)

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53 ccgcggcagc cccagcccccc gccgcctcct ccaccggcgt cccagcagcc accacccccc 1500
54 ccaccccccac aggcccccgt ccgcctgccc cctggggcc cctgttgcc cagccgcagc 1560
55 ctgactcgta ggcacacagcc gccccccgtt gcagtacacgg taccgtcctc tctcccccag 1620
56 tcccccccaag agaaccctgg ccagccatcg atggggatcg acatgcctc ggcggccgt 1680
57 ctgcaggcgt accgcactag cgccggctcc ccggccaacc agtctccac ctcggcagtc 1740
58 tccaatcaag gtttctcccc agggagctcc cgcacacaca cttccacccct gggcagcgt 1800
59 tttggggacg cgtactatga gcagcagatg gggccaggc aggccaaatgc tctgtccac 1860
60 cagctggacg agttcaacat gatggagaac gccatcagct ccagcagcct gtacagcccg 1920
61 ggctccacac tcaactactc gcaggcggcc atgatggggcc tcacgggcaag ccacgggagc 1980
62 ctgcccggact cgcagcaact gggatacgcg agccacagtg gcatccccaa catcatcctc 2040
63 acagtgcacag gagagtcccc ccccagcctc tctaagaac tgaccagctc tctggccggg 2100
64 gtcggcgacg tcagctcga ctccgacagc cagttcccc tggacgaact caagatcgac 2160
65 cccctgaccc tcgacggact gcacatgctc aacgaccccg acatgggtct ggccgaccca 2220
66 gccaccggagg acacccctcg gatggaccgc ctgtgagcgg gcacgcccgc accctgccc 2280
67 tcagccgtcc cgacggcgcc tccccagccc ggggacggcc gtgtccgc cctcgccaaac 2340
68 ggccgagctt gtgattctga gtttgcattt cgcacatgcg ccccccgcga gcccggccgt ccacccaccc 2400
69 gtttgtccac ctcccgcgaa gccaatcgc gaggccgcga gccggggccgt ccacccaccc 2460
70 gcccggccag ggctgggctg ggatcggagg cctgtgagct cccggccctg cagaccctcc 2520
71 ctgcactggc tccctcgcccc ccagccccgg ggcctgagcc gtccccctgta agatgcggga 2580
72 agtgtcagct cccggcgctgg cggggcaggct caggggaggc ggcgcgcattt tccggccagg 2640
73 ctgtggcccg tggcgcatatt tccgactgtt tgtccagctc tcaactgcctt ctttggttcc 2700
74 cggccccca gcccattccgc catccccagc cctgtgtcag gtagagagtg agccccacgc 2760
75 cggccccaggg aggaggcggc agagcgcggg gcagacgcaa agtgaardaa acactatttt 2820
76 gacggcaaaa aaaaaaaaaa agggcggcccg ctctagagta tccctcgagg ggcccaag 2878
78 <210> SEQ ID NO: 2
79 <211> LENGTH: 650
80 <212> TYPE: PRT
81 <213> ORGANISM: human
83 <400> SEQUENCE: 2
84 Met Ala Thr Ser Asn Asn Pro Arg Lys Phe Ser Glu Lys Ile Ala Leu
85 1 5 10 15
86 His Asn Gln Lys Gln Ala Glu Glu Thr Ala Ala Phe Glu Glu Val Met
87 20 25 30
88 Lys Asp Leu Ser Leu Thr Arg Ala Ala Arg Leu Gln Leu Gln Lys Ser
89 35 40 45
90 Gln Tyr Leu Gln Leu Gly Pro Ser Arg Gly Gln Tyr Tyr Gly Gly Ser
91 50 55 60
92 Leu Pro Asn Val Asn Gln Ile Gly Ser Gly Thr Met Asp Leu Pro Phe
93 65 70 75 80
94 Gln Pro Ser Gly Phe Leu Gly Glu Ala Leu Ala Ala Pro Val Ser
95 85 90 95
96 Leu Thr Pro Phe Gln Ser Ser Gly Leu Asp Thr Ser Arg Thr Thr Arg
97 100 105 110
98 His His Gly Leu Val Asp Arg Val Tyr Arg Glu Arg Gly Arg Leu Gly
99 115 120 125
100 Ser Pro His Arg Arg Pro Leu Ser Val Asp Lys His Gly Arg Gln Ala
101 130 135 140
102 Asp Ser Cys Pro Tyr Gly Thr Met Tyr Leu Ser Pro Pro Ala Asp Thr
103 145 150 155 160

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104 Ser Trp Arg Arg Thr Asn Ser Asp Ser Ala Leu His Gln Ser Thr Met
105 165 170 175
106 Thr Pro Thr Gln Pro Glu Ser Phe Ser Ser Gly Ser Gln Asp Val His
107 180 185 190
108 Gln Lys Arg Val Leu Leu Leu Thr Val Pro Gly Met Glu Glu Thr Thr
109 195 200 205
110 Ser Glu Ala Asp Lys Asn Leu Ser Lys Gln Ala Trp Asp Thr Lys Lys
111 210 215 220
112 Thr Gly Ser Arg Pro Lys Ser Cys Glu Val Pro Gly Ile Asn Ile Phe
113 225 230 235 240
114 Pro Ser Ala Asp Gln Glu Asn Thr Thr Ala Leu Ile Pro Ala Thr His
115 245 250 255
116 Asn Thr Gly Gly Ser Leu Pro Asp Leu Thr Asn Ile His Phe Pro Ser
117 260 265 270
118 Pro Leu Pro Thr Pro Leu Asp Pro Glu Glu Pro Thr Phe Pro Ala Leu
119 275 280 285
120 Ser Ser Ser Ser Thr Gly Asn Leu Ala Ala Asn Leu Thr His Leu
121 290 295 300
122 Gly Ile Gly Gly Ala Gly Gln Gly Met Ser Thr Pro Gly Ser Ser Pro
123 305 310 315 320
124 Gln His Arg Pro Ala Gly Val Ser Pro Leu Ser Leu Ser Thr Glu Ala
125 325 330 335
126 Arg Arg Gln Gln Ala Ser Pro Thr Leu Ser Pro Leu Ser Pro Ile Thr
127 340 345 350
128 Gln Ala Val Ala Met Asp Ala Leu Ser Leu Glu Gln Gln Leu Pro Tyr
129 355 360 365
130 Ala Phe Phe Thr Gln Ala Gly Ser Gln Gln Pro Pro Pro Gln Pro Gln
131 370 375 380
132 Pro Pro Pro Pro Pro Pro Ala Ser Gln Gln Pro Pro Pro Pro Pro
133 385 390 395 400
134 Pro Pro Gln Ala Pro Val Arg Leu Pro Pro Gly Gly Pro Leu Leu Pro
135 405 410 415
136 Ser Ala Ser Leu Thr Arg Gly Pro Gln Pro Pro Pro Leu Ala Val Thr
137 420 425 430
138 Val Pro Ser Ser Leu Pro Gln Ser Pro Pro Glu Asn Pro Gly Gln Pro
139 435 440 445
140 Ser Met Gly Ile Asp Ile Ala Ser Ala Pro Ala Leu Gln Gln Tyr Arg
141 450 455 460
142 Thr Ser Ala Gly Ser Pro Ala Asn Gln Ser Pro Thr Ser Pro Val Ser
143 465 470 475 480
144 Asn Gln Gly Phe Ser Pro Gly Ser Ser Pro Gln His Thr Ser Thr Leu
145 485 490 495
146 Gly Ser Val Phe Gly Asp Ala Tyr Tyr Glu Gln Gln Met Ala Ala Arg
147 500 505 510
148 Gln Ala Asn Ala Leu Ser His Gln Leu Glu Gln Phe Asn Met Met Glu
149 515 520 525
150 Asn Ala Ile Ser Ser Ser Leu Tyr Ser Pro Gly Ser Thr Leu Asn
151 530 535 540
152 Tyr Ser Gln Ala Ala Met Met Gly Leu Thr Gly Ser His Gly Ser Leu

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/549,977

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Input Set : A:\SEQ_32999A.txt
Output Set: N:\CRF4\10032005\J549977.raw

153 545 550 555 560
154 Pro Asp Ser Gln Gln Leu Gly Tyr Ala Ser His Ser Gly Ile Pro Asn
155 565 570 575
156 Ile Ile Leu Thr Val Thr Gly Glu Ser Pro Pro Ser Leu Ser Lys Glu
157 580 585 590
158 Leu Thr Ser Ser Leu Ala Gly Val Gly Asp Val Ser Phe Asp Ser Asp
159 595 600 605
160 Ser Gln Phe Pro Leu Asp Glu Leu Lys Ile Asp Pro Leu Thr Leu Asp
161 610 615 620
162 Gly Leu His Met Leu Asn Asp Pro Asp Met Val Leu Ala Asp Pro Ala
163 625 630 635 640
164 Thr Glu Asp Thr Phe Arg Met Asp Arg Leu
165 645 650
168 <210> SEQ ID NO: 3
169 <211> LENGTH: 32
170 <212> TYPE: DNA
171 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: primer
176 <400> SEQUENCE: 3
177 gcccaagctt tgtgctctgc tgtctctgaa ag 32
179 <210> SEQ ID NO: 4
180 <211> LENGTH: 23
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: primer
187 <400> SEQUENCE: 4
188 gccttgagg gatggccat cag 23
190 <210> SEQ ID NO: 5
191 <211> LENGTH: 36
192 <212> TYPE: DNA
193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: primer
198 <400> SEQUENCE: 5
199 cgccggatccg aagtgtatg actcaggattt gccctg 36
201 <210> SEQ ID NO: 6
202 <211> LENGTH: 36
203 <212> TYPE: DNA
204 <213> ORGANISM: Artificial Sequence
206 <220> FEATURE:
207 <223> OTHER INFORMATION: primer
209 <400> SEQUENCE: 6
210 cgccggatccg aagtgtata tctcaggattt gccctg 36
212 <210> SEQ ID NO: 7
213 <211> LENGTH: 54
214 <212> TYPE: DNA
215 <213> ORGANISM: Artificial Sequence

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Input Set : A:\SEQ 32999A.txt
 Output Set: N:\CRF4\10032005\J549977.raw

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217 <220> FEATURE:
218 <223> OTHER INFORMATION: primer
220 <400> SEQUENCE: 7
221 gcccctgaggg gatgggccat cagttgcaaa tcgttaactt tcctctgaca taat      54
223 <210> SEQ ID NO: 8
224 <211> LENGTH: 39
225 <212> TYPE: DNA
226 <213> ORGANISM: Artificial Sequence
228 <220> FEATURE:
229 <223> OTHER INFORMATION: primer
231 <400> SEQUENCE: 8
232 gcccctgaggg gatgggccat cagctacgag tcgtggaat                         39
234 <210> SEQ ID NO: 9
235 <211> LENGTH: 47
236 <212> TYPE: DNA
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: primer
242 <400> SEQUENCE: 9
243 cgccggatccg aagtgtgatg actcaggattt gcccctgaggg gatgggc             47
245 <210> SEQ ID NO: 10
246 <211> LENGTH: 43
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
250 <220> FEATURE:
251 <223> OTHER INFORMATION: primer
253 <400> SEQUENCE: 10
254 cagttgcaaa tcgtgaaatt tcctctcgat caatgaaaag atg                      43
256 <210> SEQ ID NO: 11
257 <211> LENGTH: 39
258 <212> TYPE: DNA
259 <213> ORGANISM: Artificial Sequence
261 <220> FEATURE:
262 <223> OTHER INFORMATION: primer
264 <400> SEQUENCE: 11
265 gcccctgaggg gatgggccat cagttgcaaa tcgtggaat                         39
267 <210> SEQ ID NO: 12
268 <211> LENGTH: 19
269 <212> TYPE: DNA
270 <213> ORGANISM: Artificial Sequence
272 <220> FEATURE:
273 <223> OTHER INFORMATION: primer
275 <400> SEQUENCE: 12
276 cgccctggtag cgagctctg                                               19
278 <210> SEQ ID NO: 13
279 <211> LENGTH: 19
280 <212> TYPE: DNA
281 <213> ORGANISM: Artificial Sequence
283 <220> FEATURE:

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 10/03/2005
PATENT APPLICATION: US/10/549,977 TIME: 14:31:48

Input Set : A:\SEQ 32999A.txt
Output Set: N:\CRF4\10032005\J549977.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:15; N Pos. 2,13 /2431,2453,2465,2468,2469,2479,2488,2489,2492,2505,2512

Seq#:15; N Pos. 2514,2519,2520

Seq#:24; N Pos. 1,13

Seq#:28; N Pos. 1528

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/549,977

DATE: 10/03/2005

TIME: 14:31:48

Input Set : A:\SEQ 32999A.txt

Output Set: N:\CRF4\10032005\J549977.raw

L:16 M:270 C: Current Application Number differs, Replaced Current Application No
L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:315 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15
L:316 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
M:341 Repeated in SeqNo=15
L:543 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:869 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:1500